REMARKS

This is in response to the Office Action dated March 3, 2003. Claims 5-6, 17-18, 23-25 and 31 have been canceled. Thus, claims 1-4, 7-16, 19-22, 26-30 and 32-33 are now pending. Attached hereto is a marked-up version of the changes made to the claim(s) by the current amendment. The attached page(s) is captioned "**Version With Markings To Show Changes Made.**"

With respect to the Restriction Requirement, applicant affirms election of I for further prosecution. The claims directed toward II have been canceled, without prejudice in view of the Restriction Requirement.

The formality objections to claims 27-28 have been addressed herein by the changes to said claims.

Claim 1 stands rejected under 35 U.S.C. Section 103(a) as being allegedly unpatentable over Collins in view of Cho. This Section 103(a) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires "following said tempering, depositing a second portion of edge seal material on at least the first substrate over at least part of the first portion of edge seal material already on the first substrate, wherein at least one of the edge seal material(s) is doped with a material so that it is more absorbing of microwave energy from 2-8 mm; forming a hermetic peripheral or edge seal at least partially between the first and second substrates by at least using microwave energy comprising a wavelength(s) of from 2-8 mm directed toward at least the second portion of edge seal material so that the second

portion of edge seal material bonds to both: a) the first portion of edge seal material on the first substrate, and b) the first portion of edge seal material on the second substrate; and evacuating a space between the first and second substrates so as to form a low pressure area having a pressure less than atmospheric pressure between the first and second substrates." The doping has been found to be very advantageous, as have the claimed wavelengths (e.g., pg. 19-20). In particular, at least one dopant is provided in at least part of the edge seal material so that the edge seal material is more absorbing of microwave energy (e.g., pg. 19, lines 8-17). Since the dopant(s) causes the edge seal material to absorb more energy, less energy is absorbed by the tempered glass substrate so that the tempered glass substrate can retain more temper strength (e.g., pg. 19, lines 11-15).

The cited art fails to disclose or suggest the aforesaid underlined and quoted aspects of claim 1. Both Collins and Cho clearly fail to disclose or suggest the claimed microwave energy including at least some wavelength(s) in the range of from 2-8 mm as required by claim 1, and also fail to disclose or suggest the claimed dopant(s) required by claim 1. Since both references fail to disclose or suggest these aspects of claim 1, even the alleged combination (which applicant believes would be incorrect in any event) would not meet the invention of claim 1. The cited art is entirely unrelated to the aforesaid underlined aspects of claim 1.

Claim 12 requires "at least some of said edge seal material is doped with a dopant so that the edge seal material is more absorbing of microwave energy from 1-10 mm so that more microwave energy is absorbed by the edge seal material and less by the glass

substrate so that the glass substrate can retain more temper strength." The cited art fails to disclose or suggest these aspects of claim 12, either alone or in the alleged combination.

Claim 19 requires that "at least some of said seal material is doped so that the seal material is more absorbing of microwave energy so that more microwave energy is absorbed by the seal material and less by the glass substrate so that the glass substrate can retain more temper strength." The cited art fails to disclose or suggest these aspects of claim 19, either alone or in the alleged combination.

Claim 21 requires that the "seal is doped with silicon carbide so that the seal is more absorbing of microwave energy." The cited art fails to disclose or suggest these aspects of claim 21, either alone or in the alleged combination.

Claim 26 requires that "at least part of the seal material is doped with silicon carbide so that the seal is more absorbing of microwave energy." The cited art fails to disclose or suggest these aspects of claim 26, either alone or in the alleged combination.

Claim 27 requires "microwave energy comprising wavelength(s) from 2-8 mm directed toward at least part of the edge seal material, wherein the seal material is doped with a material so that the seal material is more absorbing of microwave energy from 2-8 mm." The cited art fails to disclose or suggest these aspects of claim 27, either alone or in the alleged combination.

Claim 33 requires that "the seal material is doped with at least a carbide material so that the seal material is more absorbing of microwave energy from at least 2-8 mm." Again, the cited art fails to disclose or suggest these aspects of claim 33.

With respect to the double patenting rejections, it is respectfully requested that such rejections be withdrawn in view of the respective claimed inventions recited above. The cited patent(s)/application(s) fails to disclose or suggest the respective aforesaid claimed inventions.

For at least the foregoing reasons, it is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

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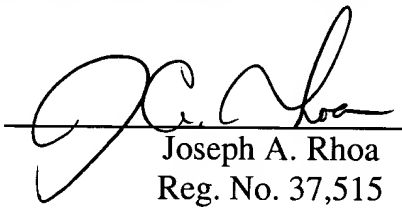
By: 

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Please cancel claims 17-18 and 23-25, without prejudice in view of the Restriction Requirement. Also, cancel claims 5-6 and 31.

1. (Amended) A method of making a thermally insulating glass panel, the method comprising:

depositing a first portion of edge seal material on first and second glass substrates;

thermally tempering the first and second glass substrates with the first portion of edge seal material thereon;

following said tempering, depositing a second portion of edge seal material on at least the first substrate over at least part of the first portion of edge seal material already on the first substrate, wherein at least one of the edge seal material(s) is doped with a material so that it is more absorbing of microwave energy from 2-8 mm;

forming a hermetic peripheral or edge seal at least partially between the first and second substrates by at least using microwave energy comprising a wavelength(s) of from 2-8 mm directed toward at least the second portion of edge seal material so that the second portion of edge seal material bonds to both: a) the first portion of edge seal material on the first substrate, and b) the first portion of edge seal material on the second substrate; and

evacuating a space between the first and second substrates so as to form a low pressure area having a pressure less than atmospheric pressure between the first and second substrates.

12. (Amended) A method of making a seal of a thermally insulating glass panel, the method comprising:

thermally tempering a glass substrate with edge seal material thereon;

providing additional edge seal material on said substrate following said tempering, so that the additional edge seal material contacts the edge seal material provided or deposited on the glass substrate prior to said tempering;

providing a plurality of spacers between the tempered glass substrate and another glass substrate; [and]

forming a seal located at least partially between the substrates by heating at least the additional edge seal material using at least microwave energy comprising a wavelength(s) of from 1-10 mm so that the additional edge seal material fuses with or bonds to the edge seal material deposited on the glass substrate prior to said tempering[.]; and

wherein at least some of said edge seal material is doped with a dopant so that the edge seal material is more absorbing of microwave energy from 1-10 mm so that more microwave energy is absorbed by the edge seal material and less by the glass substrate so that the glass substrate can retain more temper strength.

19. (Amended) A method of making a seal for a thermally insulated panel, the method comprising:

heating a first glass substrate with base seal material thereon to a temperature of from about 600-700 degrees C; [and]

following said heating, applying additional seal material and using microwave energy to re-heat the base seal material and heat the additional seal material in order to form a seal at least partially located between the first substrate and a second substrate[.]; and

wherein at least some of said seal material is doped so that the seal material is more absorbing of microwave energy so that more microwave energy is absorbed by the seal material and less by the glass substrate so that the glass substrate can retain more temper strength.

21. (Amended) A method of making a thermally insulating unit, the method comprising:

providing first and second substrates with a plurality of spacers therebetween; [and]

forming a hermetic peripheral or edge seal at least partially between the first and second substrates using at least microwave energy[.]; and

wherein said seal is doped with silicon carbide so that the seal is more absorbing of microwave energy.

26. (Amended) method of making a seal of a thermally insulating glass panel, the method comprising:

heating a glass substrate with edge seal material thereon;

providing additional edge seal material on said substrate following said heating, so that the additional edge seal material contacts the edge seal material provided or deposited on the glass substrate prior to said heating;

providing a plurality of spacers between the glass substrate and another glass substrate; and

forming a seal located at least partially between the substrates by performing another heating in order to heat at least the additional edge seal material so that the additional edge seal material fuses with or bonds to the edge seal material deposited on the glass substrate prior to said previous heating, and wherein at least part of the seal material is doped with silicon carbide so that the seal is more absorbing of microwave energy.

27. (Amended) A method of making an insulating glass (IG) window unit, the method comprising:

providing first and second glass substrates, at least one of said glass substrates being tempered;

depositing edge seal material on at least one of the glass substrates;

forming at least part of an edge seal at least partially between the first and second glass substrates by at least using microwave energy comprising wavelength(s) from 2-8

mm directed toward at least part of the edge seal material, wherein the seal material is doped with a material so that the seal material is more absorbing of microwave energy from 2-8 mm; and

wherein at least one spacer is provided between the glass substrates for spacing the substrates from one another.

28. (Amended) The method of claim 27, wherein said forming is carried out in a manner so that after the edge seal has been formed at least certain portions of the tempered glass substrate(s) retains at least about 50% of its original temper strength after the edge seal has been formed.

29. (Amended) The method of claim 27, wherein said forming is carried out in a manner so that after the edge seal has been formed at least certain portions of the tempered glass substrate(s) retains at least about 70% of its original temper strength after the edge seal has been formed.

30. (Amended) The method of claim 27, wherein said forming is carried out in a manner so that after the edge seal has been formed at least certain portions of the tempered glass substrate(s) retains at least about 80% of its original temper strength after the edge seal has been formed.

33. (Amended) A method of making an insulating glass (IG) window unit, the method comprising:

providing first and second glass substrates;

depositing edge seal material on at one of the glass substrates;

forming at least part of an edge seal at least partially between the first and second glass substrates by at least using microwave energy directed toward at least part of the edge seal material, and

wherein [at least one spacer is provided between the glass substrates for spacing the substrates from one another] the seal material is doped with at least a carbide material so that the seal material is more absorbing of microwave energy from at least 2-8 mm.